

# PROCEDURE

## PET-HSE27-EN-PRD-00002 Greenhouse Gas Reduction Planning

PART OF  
A BETTER  
FUTURE



### Objective

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To outline the process for:

- Engaging with stakeholders to identify Greenhouse Gas (GHG) reduction opportunities to meet Group public performance targets and *Our Requirements Environment and Climate Change*
- Establishing and validating the GHG emission forecast
- Identifying authorized GHG emission reduction initiatives.

### Audience

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Personnel involved in the planning, management and execution of Petroleum Deepwater (Woodside Energy) GHG reduction efforts (e.g., Manager or Superintendent Operations, Lead Principals HSE, HSE Team, Projects, Drilling and Completions Engineers, Surface Engineers, Planners, Environment and Regulatory Analysts, and Improvement team members).

### Owner

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Julian Seah, Head of Environment, Corporate

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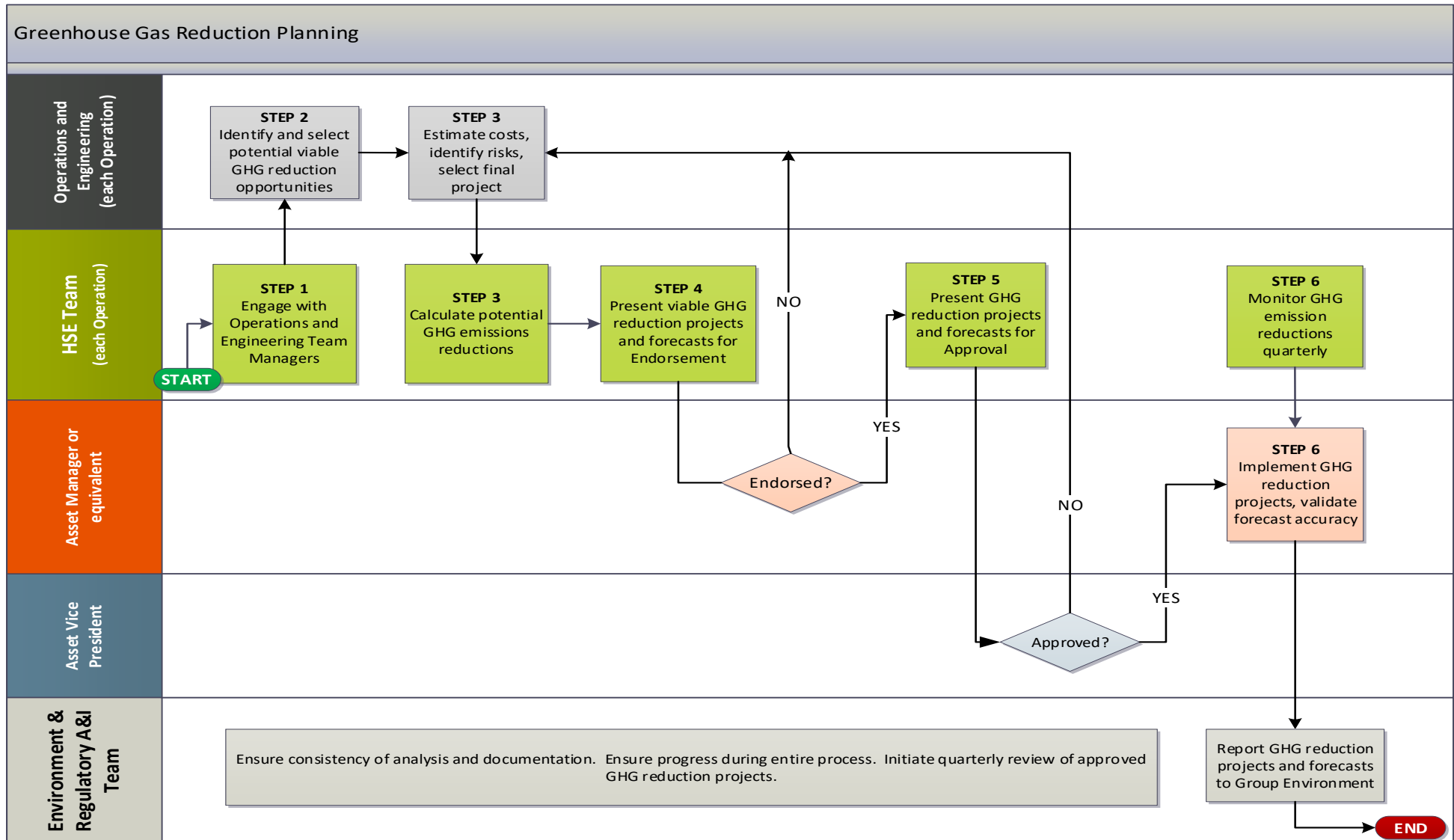
#### Document Signatures (e-signatures are permissible)

	Business Role	Name	Signature
Approver	VP HSEQ Projects	Karelis Holuby	<i>Signature on file – refer to Memorandum: Heritage BHP Petroleum HSE MS Post-Merger Update</i>

#### Disclaimer:

This document has been updated to meet post-merger requirements. Updates have been restricted to rebranding of logo, company name and revision number and date. Updates have not impacted the design or functionality, or taken away from original intent, of the document.

**Process Summary**



## Procedure

### Step 1. Engage with Operations and Engineering Team Managers

- HSE Team to meet with Operations and Engineering Team managers to communicate the process and objectives in order to gain support and identify key stakeholders.
- Environment & Regulatory A&I Team to ensure progress.

<b>Outputs</b>	<ol style="list-style-type: none"><li>1. Key stakeholder identification</li><li>2. Leadership support</li></ol>
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### Step 2. Identify and select potential viable GHG reduction opportunities

- HSE Team to engage with key stakeholders from Operations and Engineering Team to create a list of potential GHG reduction opportunities by considering:
  - historical GHG emissions trends on a facility basis and evaluating how the inventory has changed over time (preferably over a 1- to 2-year period)
  - key areas in the inventory that generate the most GHG emissions, focusing reduction opportunities in these areas (e.g., flaring and fuel gas; offshore vs. onshore).
- Prioritize the list of projects and select the most viable options using the following criteria:
  - project feasibility and benefits
  - volume and certainty of GHG emission reduction
  - secondary risk issues associated with implementation (e.g., risk to HSE, Production)
  - return on investment
  - key technical issues and magnitude of resources required to implement (e.g., cost and people resources)
  - key implementation and operational constraints (e.g., logistics, lead-times, operability)
  - potential to achieve emissions reductions within the timeframe established by Group HSE.
- Environment & Regulatory A&I Team to ensure consistency of analysis and documentation of reasons for excluding opportunities from the prioritized list.

<b>Outputs</b>	<ol style="list-style-type: none"><li>1. List of potentially viable GHG emission reduction projects</li></ol>
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### Step 3. Estimate costs, identify risks, calculate emissions, select final project

- Operations and Engineering Team to further analyze and evaluate listed GHG reduction projects by preparing detailed cost estimates accounting for:
  - studies
  - engineering, procurement, construction, and commissioning
  - shut-down requirements, technical uncertainties, contingencies, inflation, escalation
  - management and ownership.
- Operations and Engineering Team to identify risks and mitigation measures around the technical and economic feasibility of the listed projects, inclusive of any potential impacts to operations and production.
- HSE Team to calculate potential GHG emissions reductions over the life of the project.

- Operations and Engineering Team to make a final selection of projects to present for endorsement.
- Environment & Regulatory A&I Team to ensure progress.

**Outputs**

1. Viable GHG reduction opportunities
2. Measureable metrics

#### **Step 4. Present viable GHG reduction projects and forecasts for endorsement**

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- HSE Team to prepare a forecast of future emissions consistent with future production rates and drilling and completions activities as defined in the 5-year plan and based on the 2-year budget. Include recommended GHG reduction projects in the forecast.
- HSE Team to present the forecast and recommended GHG reduction projects to the relevant Asset Manager, or equivalent, for endorsement:
  - Record the endorsement using the *Approvals Required Under Our Requirements - Environment and Climate Change* (PET-HSE27-EN-FRM-00001).
- Environment & Regulatory A&I Team to ensure progress.

**Outputs**

1. GHG Forecast
2. Endorsed GHG Forecast and Reduction projects recorded in *Approvals Required Under Our Requirements - Environment and Climate Change* (PET-HSE27-EN-FRM-00001)

#### **Step 5. Present GHG reduction projects and forecasts for approval**

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- HSE Team, with support from the Asset Manager, or equivalent, to present the forecast to the relevant Asset Vice President for approval:
  - Record the approval using the *Approvals Required Under Our Requirements - Environment and Climate Change* (PET-HSE27-EN-FRM-00001).
- Environment & Regulatory A&I Team to ensure progress.

**Outputs**

1. Approved GHG Forecast and Reduction projects recorded in *Approvals Required Under Our Requirements - Environment and Climate Change* (PET-HSE27-EN-FRM-00001)

#### **Step 6. Implement and Monitor GHG Reduction Projects and Forecast Accuracy**

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- Asset Manager, or equivalent, to implement GHG reduction projects.
- HSE Team to monitor GHG emission reductions each quarter to validate predicted reductions are realized in line with forecast, and report to business-level Environment team.
- Environment & Regulatory A&I Team to report GHG reduction projects to Group Environment and initiate quarterly review.

**Outputs**

1. Completed GHG Forecast and Reduction projects in *Approvals Required Under Our Requirements - Environment and Climate Change* (PET-HSE27-EN-FRM-00001)
2. List of viable and measurable GHG reduction opportunities submitted to Group HSE
3. Quarterly reports on status of GHG reduction opportunities

## Roles and Responsibilities

Role	Responsibilities
<b>HSE Team</b>	<ul style="list-style-type: none"> <li>Facilitates the establishment and validation of the GHG emissions forecast, and the identification of authorized GHG emission reduction initiatives.</li> <li>Monitors and reports GHG emission reductions</li> </ul>
<b>Operations and Engineering Team</b>	<ul style="list-style-type: none"> <li>Assists the HSE team to establish a valid GHG emissions forecast and an inventory of authorized GHG emission reduction initiatives.</li> </ul>
<b>Asset Manager or equivalent<sup>1</sup></b>	<ul style="list-style-type: none"> <li>Endorses GHG reduction projects</li> <li>Implements approved GHG reduction projects</li> </ul>
<b>Asset Vice President</b>	<ul style="list-style-type: none"> <li>Approves GHG reduction projects</li> </ul>
<b>Environment &amp; Regulatory A&amp;I Team</b>	<ul style="list-style-type: none"> <li>Ensures consistency of analysis and documentation</li> <li>Reports GHG reduction projects to Group Environment</li> <li>Initiates quarterly reviews</li> </ul>

<sup>1</sup> For example – Head of Wells & Seismic Delivery